

We claim:

1. A method of producing a local immunogenic response in a buccal mucous membrane, saliva, and lymph nodes draining said mucous membrane, the method comprising administering in the floor of a mammal's mouth a vaccine composition comprising an immunogen specific for a pathogenic agent having a gateway into the buccal mucous membrane, wherein a local IgA antibody and IgA antibody-producing B cell response is induced.
2. The method of claim 1 wherein the IgA antibody is a secretory IgA antibody.
3. The method of claim 1 wherein said administering is by sublingual injection, deposition, bioadhesive, or capsule that releases the immunogenic composition in the floor of the mouth.
4. The method of claim 3 wherein the bioadhesive or capsule contains or is coupled to a system that promotes penetration of the immunogenic composition.
5. The method according to claim 1 wherein the immunogen is from a pathogen chosen from the group consisting of HIV virus, herpesviruses, candidae, hepatitis viruses, picornaviridae, reoviruses, adenoviruses, human papillomavirus, cytomegalovirus, Epstein-Barr virus, and aerosol transmitted pathogens.
6. The method according to claim 5, wherein the aerosol transmitted pathogen is selected from the group consisting of *Mycobacterium tuberculosis*, *Neisseria meningitidis*, *Streptococcus* type B, *Streptococcus pneumoniae* and *Bordetella pertussis*.
7. The method according to claim 6, wherein the herpesvirus is herpes simplex virus, the hepatitis virus is hepatitis A, the picornaviridae are poliomyelitis virus, the reovirus is a rotavirus.

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|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Age | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
| Gender | Male | Female | Male | Female | Male | Female | Male |
| Marital Status | Married | Single | Divorced | Widowed | Married | Single | Divorced |
| Income | \$10,000-\$19,999 | \$20,000-\$29,999 | \$30,000-\$39,999 | \$40,000-\$49,999 | \$50,000-\$59,999 | \$60,000-\$69,999 | \$70,000-\$79,999 |
| Education | High School | Some College | College | Postgraduate | High School | Some College | College |
| Occupation | Unemployed | Service | Production | Professional | Unemployed | Service | Production |
| Region | North | South | West | East | North | South | West |
| City | Atlanta | Los Angeles | New York | San Francisco | Atlanta | Los Angeles | New York |
| State | GA | CA | NY | CA | GA | CA | NY |
| Country | USA | USA | USA | USA | USA | USA | USA |
| Language | English | Spanish | French | German | English | Spanish | French |
| Religion | Protestant | Catholic | Jewish | Muslim | Protestant | Catholic | Jewish |
| Political Party | Democrat | Republican | Independent | Democrat | Democrat | Republican | Independent |
| Health Status | Good | Fair | Poor | Good | Good | Fair | Poor |
| Insurance | Medicare | Medicaid | Private | Medicare | Medicare | Medicaid | Private |
| Employment | Full-time | Part-time | Unemployed | Full-time | Full-time | Part-time | Unemployed |
| Home Ownership | Rent | Own | Rent | Own | Rent | Own | Rent |
| Vehicle Ownership | None | One | Two | None | None | One | Two |
| Travel Frequency | Never | Once | Twice | Three | Never | Once | Twice |
| Travel Purpose | Business | Leisure | Family | Business | Business | Leisure | Family |
| Travel Budget | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per year) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per year) | \$1000-\$2000 | \$2000-\$3000 | \$3000-\$4000 | \$4000-\$5000 | \$1000-\$2000 | \$2000-\$3000 | \$3000-\$4000 |
| Travel Satisfaction (per year) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per month) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per month) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per month) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per week) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per week) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per week) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per day) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per day) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per day) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per hour) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per hour) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per hour) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per minute) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per minute) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per minute) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per second) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per second) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per second) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per millisecond) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per millisecond) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per millisecond) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per microsecond) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per microsecond) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per microsecond) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per nanosecond) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per nanosecond) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per nanosecond) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per picosecond) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per picosecond) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400-\$500 | \$100-\$200 | \$200-\$300 | \$300-\$400 |
| Travel Satisfaction (per picosecond) | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Satisfied | Satisfied | Neutral |
| Travel Frequency (per femtosecond) | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Travel Budget (per femtosecond) | \$100-\$200 | \$200-\$300 | \$300-\$400 | \$400 | | | |